

DELAWARE RIVER BASIN

01461000 DELAWARE RIVER AT LUMBERVILLE, PA

LOCATION.--Lat 40°24'27", long 75°02'16", Bucks County, Hydrologic Unit 02040105, at pedestrian bridge at Lumberville, 1.4 mi upstream from Lockatong Creek, and at river mile 155.4.

DRAINAGE AREA.--6,598 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of dissolved ammonia plus organic nitrogen (00623), dissolved nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570).

COOPERATION.--Field data and samples for laboratory analyses were provided by the New Jersey Department of Environmental Protection.

Determination of dissolved ammonia, total ammonia, dissolved nitrite, dissolved orthophosphate, biochemical oxygen demand, total suspended solids, fecal coliform, *E. coli*, and enterococcus bacteria was performed by the New Jersey Department of Health and Senior Services, Public Health and Environmental Laboratories, Environmental and Chemical Laboratory Services. Determination of chlorophyll a was performed by the New Jersey Department of Environmental Protection, Bureau of Freshwater and Biological Monitoring Laboratory.

COOPERATIVE NETWORK SITE DESCRIPTOR.--Delaware River Main Stem, New Jersey Department of Environmental Protection Watershed Management Area 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfldr, field, std units (00400)	Specific conductance, wat unf 25 degC μS/cm (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)	
NOV 26...	1000	16,500	2.4	0.111	0.086	766	11.5	92	8.2	128	7.0	6.0	43	
FEB 13...	0900	6,090	--	0.062	0.048	760	13.9	101	8.5	208	-2.1	2.0	68	
MAY 08...	1000	11,300	1.8	0.055	0.041	756	9.8	97	7.8	150	17.7	14.5	53	
AUG 21...	1000	9,060	4.2	0.097	0.074	760	8.2	96	7.9	199	22.8	23.0	74	
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Date		Calcium water, fltrd, mg/L (00915)	Magnesium water, fltrd, mg/L (00925)	Potassium water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L as CaCO ₃ (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents, mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
NOV 26...		11.2	3.58	0.92	8.49	27	12.4	<0.17	4.6	12.2	--	76	3	0.43
FEB 13...		17.4	6.01	1.22	14.5	E51	26.6	<0.17	3.1	17.3	--	126	3	0.20
MAY 08...		13.6	4.64	1.07	9.65	38	16.2	<0.17	1.9	13.0	86	101	5	0.18
AUG 21...		20.0	5.91	1.33	10.6	51	18.1	<0.17	5.0	14.9	111	119	12	0.21
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Date		Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, water, fltrd, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd, mg/L (00600)	Total carbon, suspnd sediment total, mg/L (00694)	Inorganic carbon, suspnd sediment total, mg/L (00688)	Organic carbon, suspnd sediment total, mg/L (00689)
NOV 26...		0.037	0.131	--	<0.003	0.032	0.05	0.021	0.035	--	0.48	0.4	<0.1	0.4
FEB 13...		<0.030	<0.030	1.08	0.007	0.038	0.10	0.033	0.040	1.3	1.4	0.3	<0.1	0.3
MAY 08...		<0.030	<0.030	0.69	0.007	<0.020	0.10	0.013	0.037	0.87	0.97	0.4	<0.1	0.4
AUG 21...		0.020	<0.020	1.01	<0.003	0.040	0.11	0.043	0.058	1.2	1.3	0.7	<0.1	0.7

DELAWARE RIVER BASIN**01461000 DELAWARE RIVER AT LUMBERVILLE, PA--Continued**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Organic carbon, water, fltrd.	BOD, water, unfltrd 5 day, 20 degC	Chlorophyll a fluorometric method, corrted	Boron, water, fltrd.
	mg/L (00681)	mg/Lm (00310)	µg/L (32209)	µg/L (01020)
NOV 26...	3.2	<1.0	--	14
FEB 13...	2.1	E1.1	--	E7.5
MAY 08...	2.1	E1.5	13.4	16
AUG 21...	3.1	E1.2	1.60	20

Remark codes used in this table:

< -- Less than

E -- Estimated value

WATER-COLUMN BACTERIA ANALYSES

Samples were collected synoptically over a 30-day period during the summer.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Enter-	E coli,	Fecal	Enter-	E coli,	Fecal
		cocci, m-E MF, water, col/	m-TEC MF, water, col/	coli- form, ECbroth			
		100 mL (31649)	100 mL (31633)	100 mL (31615)			
JUN 11...	0924	40	400	40	JUL 02...	0940	30
18...	0935	130	300	220	09...	0955	30
25...	1010	330	600	1,100			

Remark codes used in this table:

< -- Less than